quagga, which Lord Morton used in "infecting," is now an extinct species, Ewart uses zebras. He has bred, up to the time of writing, nine zebra ♂ horses, ♀ hybrids, and three reciprocal hybrids. In two cases he has crossed a mare with a zebra, and then obtained a second foal from the mare mated with a horse. In one case there were quite marked stripes; in the second case there were faint and few stripes. In two other cases a mare which had already had foals by a horse and then by the zebra, had a third foal by a horse, and this foal was unmarked. Ewart does not regard the stripes seen in the first two cases good evidence for telegony, because of the frequency with which such stripes occur on pure-bred foals. He finds that foals are far more often marked with stripes — apparent or real — than is generally supposed, and that stripes will be often seen in horses if they are carefully looked for. Ewart is continuing his experiments; but it seems as though the fact that even marked stripes may occur in normally bred foals will interfere with getting a satisfactory conclusion concerning telegony in horses.

Common Salt a Plant Poison. — A solution may have either of two injurious effects: it may act osmotically and withdraw from the protoplasm the necessary water; it may act chemically. Sodium chloride has usually been regarded as acting osmotically only. Now True[1] shows that when a solution of sodium chloride or potassium nitrate is made of the same osmotic value as a sugar solution, it is far more injurious than the sugar solution. This can only be interpreted to mean that the salt has some additional effect above the osmotic effect, and this can only be a chemical one.

Physics and General Biology.[2] — The naturalist has frequent need of a good physics. We therefore take pleasure in noticing a new text-book on this subject by two professors at Yale University. The treatment, while quantitative, does not involve the use of calculus. Of most use to the naturalist will be the sections on instruments for measuring time and length; tables of densities of gases at various temperatures and pressures and of solids and liquids; surface tension, to which an entire chapter is devoted; solutions (including a fairly full treatment of osmosis); electric cells and galvanometers;

[1] True, R. H. Physiological Action of Certain Plasmolyzing Agents, *Bot. Gazette*, vol. xxvi, pp. 407–416, December, 1898.

[2] Hastings, Chas., and Beach, F. K. E. *A Text-Book of General Physics.* Boston, Ginn & Co., 1899. viii + 768 pp., 495 figs.

the electric theory; waves, especially sound waves; the physical theory of hearing and musical instruments; and valuable chapters on Elementary Theory of Optical Instruments, Spectroscopy, and Maximum Efficiency of Optical Instruments.

The Plankton of the Limfiord.[1] — This fiord is a tortuous channel, 92 miles in length, which traverses the peninsula of Jutland. In 1825 an irruption of the North Sea drove back the fresh and brackish water fauna of the fiord and replaced it with that of the sea. A slow current passes through it from the east or the west according to the relative levels of the North and Baltic Seas, though in recent years it has been predominantly from the North Sea eastward. The stream is shallow — 2–13 fathoms — with a few expansions in shallow lakes, and exhibits practically uniform conditions of temperature and salinity at the top and the bottom. Owing to the slight depth the temperature rises to 18.4° C. in the summer, and the salinity averages about 3 per cent. The plankton of this interesting region has been investigated by Dr. Petersen of the Danish Biological Station. Three traverses of the fiord were made in 1896 and 1897, and the collections thus made were supplemented by a seasonal series and by others from the Cattegat and the Baltic. The qualitative examination, made by Mr. H. Grau, was confined in the main to the diatoms and the Peridinieæ, which constitute the bulk of the plankton. The investigation determined that the amount of plankton per □ meter in the shallow fiord was 10–50 times as great as that of the adjacent and deeper North Sea, and more than double that of the Cattegat. The constitution of the plankton is peculiar in that the predominant species are neritic rather than oceanic, and are not thus abundant in the North Sea, whence the fiord receives its water, nor in the Cattegat, into which it empties. Its diatom flora must therefore breed in the water in transit in response to some change in the physical-chemical environment, as, for example, contact with the bottom, rise in temperature, or the addition of nitrogen by the tributary rivulets. Another instance of this unique phenomena — namely, the maintenance of a peculiar plankton at a given point in a body of water traversed by a current — was discovered in the Cattegat, where an undercurrent from the deeper Skager Rack enters this shallower area, and there is developed within it, in passing, a local and peculiar diatom flora. The results of this work lead the author to suggest that "guide

[1] Petersen, C. G. J. Plankton Studies in the Limfjord, *Rep. Danish Biol. Station*, vol. vii, 1897. 23 pp., with 1 map and 4 tables. 1898.